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Analyzability and semantic associations in referring expressions : a study in comparative lexicology

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Chapter 2

Lexical Motivation Cross-linguistically: The History of an Idea

2.1. INTRODUCTION

The aim of this chapter is to provide an overview of the history of thoughts on the phenomenon of motivated terms, with the discussion being restricted to such works dealing with it in a comparative perspective. The reason for the inclusion of such a chapter is twofold: first, the topic has a long and rich history in European thought, being rooted in Renaissance Philosophy on the one hand and in the more practically oriented goal of effective language teaching on the other, the latter in the context of the evolving Humanist movement.

Second, a good portion of these publications is very far-flung, and there is no continuous tradition linking them together. It should be stressed that most authors writing on the topic do not seem to have been aware of their predecessors and therefore unknowingly were reinventing the wheel each time on their own. Thus, this chapter does not merely summarize an already established and well-known history of the topic that is easily accessible. One of its purposes is therefore to prevent some of the ingenious works on the topic from continuing to be buried in oblivion.

Some of the works to be discussed are quite old, and obviously do not adhere to the standards of modern research. What is the point in discussing all this old, nearly forgotten literature? Before embarking upon the purely linguistic discussion in the main body of the present work, it is worth noting that similarities and differences in the semantic structure of morphologically complex expressions have, either implicitly or explicitly, figured prominently, and were sometimes even at the heart of many of the trends and debates in the philosophy of language in the past three centuries. They have played a vital role in past approaches to the everlasting quest of working out the relation of what is culture-specific in human thinking to the grand scheme of the “psychic unity of man” (for an overview on this notion see Carneiro 2003: 17-18) and vice versa. In particular, many authors have assumed that the language-specific conceptualizations of individual concepts can be straightforwardly identified with the “*völkergedanken*” in the sense of Bastian (1870, 1881), and the corresponding concepts with the universal “*elementargedanken*” shared by all humans. It is this importance which has been assigned to the topic by many authors in the past that makes it, next to a great many other reasons which hopefully will become clear in the course of this work, a worthwhile enterprise to

reconsider it with the possibilities of today, although the big metaphysical questions connected with it in earlier times will not be dealt with any further.

The overview provided in the following cannot claim exhaustiveness, in particular as far as the older literature is concerned, since a detailed systematic exploration would have constituted a time-consuming research undertaking in itself. Nevertheless, it does incorporate an exemplary and representative selection of what may be taken to be the most relevant writers from earlier centuries on the topic. The aim of this chapter is to provide a short history of the idea of lexical motivation, not to develop the framework on which this study is based. Works that are both important contributions to the history of the idea and relevant for the development of the framework of the present study will be mentioned briefly here, and relevant aspects will be discussed in more detail in chapter 3.

2.2. EARLY CONSIDERATIONS

The discussion of this section is set roughly in the 16th century. Despite the huge interest in etymology in ancient Greece and Rome, acquaintance with multiple languages (other than Greek and Latin) was extremely restricted and therefore the empirical basis for a consideration of patterns of lexical motivation in a wider array of languages was largely lacking (note, however, that even in Plato's *Cratylus* the "origin" of some words is sometimes sought in different languages or varieties of Greek). A similar situation held in the Middle Ages, where even the intellectual elite at universities was usually competent in their local vernacular language and Latin and even knowledge of Greek was highly unusual. This, however, does not exclude the possibility that relevant literature predating the 16th century may actually exist. Appraisal of the vernaculars and a sense of awareness of their diversity eventually arose in the Renaissance era, and it is precisely from this time that a variety of conceptions of language that recur to data from different languages is found, such as the etymological-philosophical-theological notion of the *harmonia linguarum*, which sought to reduce the diversity found in the (then known) languages of the world to a common *ursprache* of mankind, which was usually taken to be Hebrew. Also in this era, there are first traces of awareness for differences between motivational patterns in languages, both quantitatively and conceptually.

The first writer to be considered is the 16th century Spanish humanist and grammarian Francisco Sánchez de las Brozas, better known as Franciscus Sanctius Brocensis, the Latinized version of his name. Sanctius was, as many of his contemporaries, a strong believer in reason and rationality as the defining features of the human race, and therefore, since language is a product of the human mind, emphasized the logical structure and the reason enshrined in it (his work is often regarded as an important precursor of the *Grammar of Port-Royal*). For this reason, in the introduction to his then well-known and popular grammar of Latin entitled *Minerva o de causis linguae Latinae*, Sanctius sides with Plato's *Cratylus* in the question of the nature of the linguistic sign (arbitrary vs. motivated), since he cannot imagine that the rational human mind should create a mental lexicon that is characterized by methodless and haphazard form-meaning associations. Instead, he takes the position that one true, non-arbitrary etymology for each expression must exist

which mirrors its rational structure. It is in this context that he discusses the following possible objection:

Sed dices: qui potest fieri ut uera sit nominis etymologia, si una eademque res uariis nominibus per orbem terrarum appellatur? Dico: eiusdem rei diuersas esse causas, quarum illi hanc, nos aliam contemplamur. Sic Graeci ἄνεμον, Latini uentum appellauere: illi a spirando, hi a ueniendo. Fenestram a φαίνεσθαι deduxit Latinus, “ventana” a nostris dicitur, Lusitanis “ianella,” quasi parua ianua.

But you will say: How can it be possible that there is a true etymology of a name, if one and the same thing is designated by various names throughout the globe? I say: the same thing has diverse causes, of which they point their attention to this one, we to another one. Thus, the Greeks call the wind *anemos*, the Romans *ventus*, the former from blowing [*anemidzein*], the latter from coming [*venire*]. The Romans derived *fenestra* [‘window’] from *phainesthai* [‘to appear’], by our people it is called *ventana* [showing a connection to the aforementioned *ventus*] and by the Lusitanians¹ *ianella*, as if it were a little door [*ianua* ‘door’ + diminutive suffix]. (1995/1587: 40, translation and additions in square brackets by the present author, which is always the case also for following translations unless otherwise indicated).

What sets Sanctius apart from most of his contemporaries is that he actually cites real data from a number of languages in his discussion of the matter (albeit often drawing the wrong conclusions) instead of excogitating hypothetical connections between words in just one language (see also Percival 1988 for historical discussion).

Another humanist writer who displayed a remarkable awareness for the issue is the Czech Johann Amos Comenius (writing about 80 years after Sanctius) who is today remembered primarily for his pedagogical and educational writings. Lexical Motivation is discussed in various passages of his *Novissima Linguarum Methodus*, a lesser known work of his dealing with translation. Comenius commanded a large number of languages from different genera of Indo-European as well as Hebrew, and thus it is not surprising that it occurred to him that it is sometimes impossible to render a morphologically complex word in one language with an equally complex term in another, or a morphologically simplex word with an equally monomorphemic one.

Evitari tamen, quin se Primigeniarum exercitui derivatæ quædam et compositæ admiscerent, non potuit. *Primùm*, quia vernaculis quibusdam primitivis, quæ responderent Latinæ primitive, defuerunt: ut *schlecht*, *Woche*, *Mangel*, *Üben* etc., quae Germanis primitiva sunt, Latinè autem nonnisi per derivatas et compositas illas *Simplex*, *Septimana*, *Defectus*, *Exercere* etc. reddi possunt (2005/1648: 295-296).

Still, he [the translator in the process of translating from Latin into modern vernacular languages] could not avoid a certain amount of scrutinized derived words and compounds mixing themselves in. First, because the vernaculars may lack an amount of simple words

¹ That is, the Portuguese.

which correspond to simple words in Latin, like *schlecht*, *Woche*, *Mangel*, *üben* ['simple',² 'week,' 'lack,' 'practice'] etc., which are simple in German, but can nevertheless be expressed by derivatives and compounds in Latin, like *simplex*, *septimana*, *defectus*, *exercere*.

In addition, Comenius was also sensitive to differences in Word-Formation techniques:

Hoc item in Vocibus observandum est, quòd quævis lingua *primigeniarum* habet numerum quendam certum, haud ita multum, à quibus deducunt caeteras. Differunt autem, quòd quædam solâ *derivatione*, ut ferè *Hebræa* cum cognatis suis; quædam sola *compositione*, ut ferè *Germanica*; quædam utroque modo, ut *Græca*, *Latina*, *Slavonica* (2005/1648: 74).

It can be observed that any given language has a certain number of principal words, often not so many, from which it derives the others. Languages differ, however, because certain ones do so only by derivation, like in general Hebrew and its cognates, certain ones only by composition, like in general German, and others by both means, like Greek, Latin, and Slavonic.

Comenius also had a very fine sense of similarities in the conceptual content in terms with the same meaning across languages. Thus, with unmistakable delight and great sarcasm, he ridicules a certain Georg Phillip Harsdörffer, a German, who had proposed in 1646 that the Polish and Hungarian term *weiwod* 'duke' is etymologically identical with the Celtic term *witdod* 'philosopher' (itself a loan translation of Greek *philosophos*). Comenius comments on this by saying that it is certainly not a mistake for a translator or anyone who deals with language in general to be multilingual, since, had Harsdörffer known any Polish, it would have occurred to him that *weiwod* is in fact identical in conceptual structure to the corresponding term in his native language, *Herzog*, and he would not have proposed his venturesome etymology (2005/1648: 463, both terms were in fact, as correctly pointed out by Comenius, originally compounds of the respective terms for 'army' and 'leader').

A third early work on the subject that is relevant in the present context and, as will be seen, the ideas of which were an inspiration to certain linguists, is Giambattista Vico's *Scientia Nuova*, first published in 1725 and with a lot of reworking as a second and final edition in 1744. Vico's philosophical program may be summarized in a nutshell as the quest for the (hidden) underlying unity of humankind in all the diversity in conduct and customs of the different peoples of the world. Inspired by the universal language schemes which had been developed in a bewildering array of varieties by 17th century writers such as Wilkins, Dalgando and Leibniz (see Cram and Maat 2000), one place where Vico was looking for this unity was, of course, language. Vico believed that varying living conditions had superimposed regional peculiarities to the underlying sameness of the peoples of the world and their culture, which according to him are mirrored in language:

... [C]ome certamente i popoli per la diversità de' climi han sortito varie diverse nature, onde sono usciti tanti costumi diversi; così dalle loro diverse nature e costumi sono nate

² In present-day German, *schlecht* primarily means 'bad.' At the time Comenius was writing, the dominant meaning was however 'plain, simple, frugal,' a meaning associated in Modern German exclusively with the variant form *schlicht* (Kluge 2002, s.v. *schlecht*, *schlicht*).

altrettante diverse lingue: talchè, per la medesima diversità delle loro nature, siccome han guardato le stesse utilità o necessità della vita umana con aspetti diversi, onde sono uscite tante per lo più diverse ed alle volte tra lor contrarie costumanze di nazioni; così e non altrimenti son uscite in tante lingue, quant'esse sono, diverse. (1976/1744: 421-422)

[A]s the peoples have certainly by diversity of climates acquired different natures, from which have sprung as many different customs, so from their different natures and customs as many different languages have arisen. For by virtue of the aforesaid diversity of their natures they have regarded the same utilities or necessities of human life from different points of view, and there have thus arisen so many national customs, for the most part differing from one another and at times contrary to one another; so and not otherwise there have arisen as many different languages as there are nations (Bergin and Fish 1984: 148).

The further discussion makes clear that by “different points of view,” Vico, assuming a quasi-onomasiological perspective, refers to the different ways in which the same concept may be verbalized in different languages:

Perciò da noi in quest' opera la prima volta stampata si è meditata un' *Idea d'un dizionario mentale da dare le significazioni a tutte le lingue articulate diverse*, riducendole tutte a certe unità d'idee in sostanza, che, con varie modificazioni guardate da' populi, hanno da quelli avuto vari diversi vocaboli... (1976/1744: 422)

And for this reason we excogitated, in the first edition of this work ..., an *Idea of a Mental Dictionary* for assigning meanings to all the different articulate languages, reducing them all to certain unities of ideas in substance, which, considered from various points of view, have come to be expressed by different words in each (Bergin and Fish 1984: 148).

Vico mentions proverbs which, although they express the same semantic content, are coined from varying notional templates in different languages (such as, for instance, English *to have one's cake and eat it too* vs. German *auf zwei Hochzeiten tanzen*, literally ‘to dance on two weddings’) as one of several examples to add flesh to these theoretical considerations. Unfortunately, there are no lexical examples taken directly from actual languages, but Vico's discussion makes it quite clear that his thoughts are applicable to languages' lexical structure as well. Vico's work is important, because, although deeply rooted in contemporary thinking³, he is not concerned with pseudo-etymological guesswork but

³ Vico himself cites Hayne (1639) as an inspiration and as a brother in mind, although Hayne is concerned more with the rather traditional topic of the then popular concept of the *Harmonia Linguarum* (see also Percival 1988 for discussion). The only relevant passage from Hayne that Vico may refer to runs as follows:

Qui [Hayne's colleague Henry Jacob, MU] mihi inter colloquendi familiaritatem saepius insinuavit adeo se in verborum causas penetrasse, ut Artis quoddam Etymologicae Systema sibi fabricavit, & cum docti priores universi rem Etymologicam, aut carptim quidem atque obiter tractarint, aut cum plenissime, non nisi voces ordine Alphabetico Primitivas disposuerint; ipse profitetur se methodo sua & hactenus intentata, per certas proprietatum classes subordinatim velle istas disponere, donec in paucissimis desinant Principiis: ut haec verborum Philosophia exacte imitetur illam rerum. ... Sic tandem (quod primum mihi optandum videbatur) evadet haec Harmonia Linguarum seu Ars Etymologica multo perfectior, & linguarum studiosis fructuosior (Hayne 1639: 64-5).

rather assumes what one may call a synchronic orientation. Even more importantly, the informal notion of “different points of view” enshrined in linguistic expressions in different languages for the same extra-linguistic referent, implicit for instance in Sanctius’s writing, is fully articulated for the first time in Vico, and, as will emerge from the ensuing discussion, it will continue to turn up at various points in later centuries, up to contemporary linguistic research.

2.3. HUMBOLDT AND AFTERMATH

The next author that will be shown to have discussed the idea of “different points of view” in languages’ expressions is probably the most famous and the most influential to be discussed here: Wilhelm von Humboldt. It is of course not the point of this discussion to attempt to deal with the enormous exegetical literature on Humboldt, but rather to demonstrate, using various passages of his writings, that considerations very similar to the ones already seen in earlier writers figure prominently in important passages of Humboldt’s work. For instance, in the discussion of the famous (or perhaps infamous) concept of *innere sprachform*, often considered the central notion of his work, Humboldt makes it very clear that an important part of this idea consists of the observation of different aspects highlighted by terms for one and the same object in different languages or even within one language. Humboldt’s example is the ‘elephant’ in classical Sanskrit, which features a variety of terms for this animal that are motivated by different aspects of its appearance and behavior:

Wie bei der Lautform als die beiden hauptsächlichsten zu beachtenden Punkten die Bezeichnung der Begriffe und die Gesetze der Redefügung erschienen, ebenso ist es in *dem inneren, intellektuellen Theil* der Sprache. ... Denn es muß innerlich jeder Begriff *an ihm selbst eigenen Merkmalen, oder an Beziehungen auf andere* festgehalten werden, indem der Articulationssinn die bezeichnenden Laute auffindet. Dies ist selbst bei äußeren, körperlichen, geradezu durch die Sinne wahrnehmbaren Gegenständen der Fall. Auch bei ihnen ist das Wort nicht das Äquivalent des den Sinnen vorschwebenden Gegenstandes, sondern der Auffassung desselben durch die Spracherzeugung im bestimmten Augenblicke der Worterfindung. Es ist dies eine vorzügliche Quelle der Vielfachheit von Ausdrücken für die nämlichen Gegenstände; und wenn z.B. im Sanskrit der Elephant bald der zweimal Trinkende, bald der Zweizahnige, bald der mit einer Hand Versehene heißt⁴, so sind

He [Hayne’s colleague Henry Jacob] repeatedly communicated to me in intimate interlocutions that he had penetrated so deep into the causes of words that he had fabricated himself a certain etymological system; and whereas all the earlier scholars treat the issue of etymology either somewhat sporadically and haphazardly or, if they treat it in any detail, still merely arrange the simple words in alphabetical order, he teaches that he wants to arrange them, following his so far unattempted method, according to certain sets of distinctive features until they end up resting on very few principles, so that the philosophy of the words precisely imitates the one of the things [which they designate]. ... Thus, finally, (what seemed primarily desirable to me) the Harmony of Languages or Art of Etymology would emerge much more perfectly and fruitfully for the language student.

⁴ The explanation for the “twice-drinking one” is that the elephant first imbibes water with its trunk and only then pours it into its mouth. The explanation for “the one equipped with a single hand” is a metaphorical transfer of the human hand to the elephant’s trunk.

dadurch, wenn auch immer derselbe Gegenstand gemeint ist, ebenso viele verschiedene Begriffe bezeichnet. Denn die Sprache stellt niemals die Gegenstände, sondern immer die durch den Geist in der Spracherzeugung selbstthätig von ihnen gebildeten Begriffe dar; und von dieser Bildung, insofern sie als ganz innerlich, gleichsam dem Articulationssinn vorausgehend angesehen werden muß, ist hier die Rede. (Humboldt 1998/1832: 213-14, emphasis added)

Just as designation of concepts and the laws of syntax appeared, in the sound-form, as the two points chiefly to be noted, so the same holds good in the *inner, intellectual part of language*. ... For every concept must inwardly be held fast to *markers peculiar to itself, or to relations with other concepts*, while the sense of articulation discovers the designating sounds. This is even the case with external physical objects that are plainly perceivable by the senses. Even for them the word is not the equivalent of the object that hovers before the sense, but rather the conception thereof through language-production at the particular moment of finding the word. This is a notable source of the multiplicity of expressions for the same objects; and if in Sanscrit, for example, the elephant is now called the twice-drinking one, now the two-toothed one, and now the one equipped with a single hand, as many different concepts are thereby designated, though always the same object is meant. For language never represents the objects, but always the concepts that the mind has spontaneously formed from them in producing language; and this is the forming under discussion here, insofar as it must be seen as quite internal, preceding, as it were, the sense of articulation. (Losonsky 1999: 83-84, emphasis added and original emphases removed).

It is very clear that, at least in the context of this example, the “inner, intellectual part of language” is the conceptual content of the individual motivated terms (in this case, the Sanskrit terms for ‘elephant’), and its source concepts are referred to by the phrase “to markers peculiar to itself, or to relations with other concepts.” From these and other observations, Humboldt concluded that there is a mental peculiarity of the speech community enshrined in its language which corresponds closely to the preferences a language makes in the semantic connections in its lexicon (in Humboldtian terms, the “Nebenideen” or “subsidiary ideas” of words, as represented by the reference to certain aspects of the entity to be named) and in those areas of its grammar which are related to the conceptual organization of the environment.

For example, a few pages later Humboldt mentions the fact that in a North American language with an animate/inanimate-distinction in its pronoun system, the stars are treated as animate grammatically and that the stars must therefore be conceived of as human-like by speakers of this language (an assumption which is, of course, problematic). A similar spirit can be found in the following lines of an earlier work of Humboldt written in French (interestingly, on the languages of North America as well), which is worth quoting here because a very concise phrasing of the above ideas is found in it and, more importantly, a possible comparative perspective is outlined, using the semantic domain of the human intellectual faculties as an example:

On a souvent observé que les termes qui servent dans différentes langues à exprimer les mêmes objets, surtout s'il s'agit d'idées ou de sentimens, diffèrent beaucoup dans les nuances plus fines de leurs acceptions. En analysant exactement chacun de ses termes, en se déterminant avec précision la valeur, et en les comparant ensuite ensemble, on acquiert une idée beaucoup plus parfaite et plus complete de l'objet même qu'ils dénotent. Chaque

mot présentant une idée nuancée d'une certaine manière, et ces nuances provenant d'un côté de la nature de l'objet, de l'autre de la façon de le saisir, on apprend à connoître l'un et l'autre dès qu'on s'élève à un point de comparaison général; tandis que le raisonnement purement abstrait ne conduiroit jamais qu'imparfaitement à établir ces nuances, et par conséquent à embrasser toute l'étendue et toutes les modifications de l'objet. On pourroit de cette manière faire un travail aussi utile que piquant sur les Synonymes dans différentes langues. ... En analysant et en comparant p.e. les mots qui dans les langues savantes de l'Antiquité, et nos modernes les plus cultivées désignent les facultés intellectuelles de l'homme, on feroit un cours pratique de cette partie de la Psychologie d'autant plus intéressant qu'on y découvriroit la manière de penser et de sentir de nations entières (Humboldt 1963/1821: 314-315)

One has frequently observed that in different languages the terms that serve to express the same objects, especially when one is dealing with terms for ideas or sentiments, differ very much in highly subtle semantic nuances. In analyzing closely each of these terms, in determining with precision the content, one acquires a highly consummate and complete idea of the very object they designate. Every word presents a nuanced idea in a certain manner, and these nuances stem from an aspect of the nature of the object, and on the other hand from the manner of conception, and as one becomes acquainted with one and the other, one elevates from there to a point of general comparison; whereas pure abstract reasoning would never lead to establishing its nuances other than imperfectly, and consequently to embracing the whole variation and modifications of the object. In this manner one could produce a work as useful as acute on the synonyms in different languages. ... In analyzing and comparing for instance the words which in the savage languages of antiquity and in our modern, more cultivated languages designate the intellectual capabilities of man, one could produce a practical course of this part of psychology which is all the more interesting in that one would discover the mode of thought and sensation of entire nations. (translation with help from Nadège Lechevrel)

2.4. VÖLKERPSYCHOLOGIE

There is a direct connection between both Vico's and Humboldt's ideas in research within the *völkerpsychologie* paradigm, which can be roughly described as an amalgam of Humboldtian ideas with influences from ethnology, the emerging discipline of psychology, and earlier work with respect to the issue at hand. In 1869, a review (Eberty 1869) of a book on Vico by Carlo Cantoni was published in the accompanying journal to the research program, edited by the leading *völkerpsychologists* Steinthal and Lazarus and entitled *Zeitschrift für Völkerpsychologie und Sprachwissenschaft*. Eberty (1869: 453) interprets the above quoted passages from Vico to the effect that "[Vico] glaubte, man könnte ein Universal-Etymologikon machen, welches nach der Wortbezeichnung darstellte, wie dieselbe Sache von den verschiedenen Völkern angeschaut ward" / "Vico believed one could create a universal etymologicon which displays according to the denomination how the same thing was beheld by the different peoples." This undertaking is enthusiastically welcomed by August Friedrich Pott (1974/1884-1890]: 42), who had been closely associated with the *völkerpsychologie* movement. But Pott also published an interesting and unfortunately forgotten article on the subject two decades earlier in the aforementioned journal entitled *Über Mannichfaltigkeit des sprachlichen Ausdrucks nach Laut und Begriff* (Pott 1860). In this, he essentially takes up the "different points of view"-idea already familiar from Vico, in

which the fundamental unity of mankind manifests itself. Like Vico, Pott believes in “die Einheit des reinen Gedankens” / “the unity of pure thought,” which is the same among all humans when contemplating a certain entity in the extra-linguistic world, but which is expressed to by a “oft gar bunt aussehender sprachlicher Ausdruck für denselben” / “often quite colorful looking linguistic expression for it.” For Pott, these linguistic realizations are symptoms of different “Volks-Logiken” / “folk-logics” (1860: 254) which manifest themselves in the different individual languages (note again the close connection to Humboldt) by highlighting certain aspects of the referent while at the same time necessarily neglecting others. The following quotes illustrate this line of thought:

Es kann aber auf der anderen Seite eben so wenig befremden, wenn, namentlich grundverschiedene Sprachen, zu Bezeichnung d e f f e l b e n Objects oftmals nicht bloß zu ganz verschiedenen L a u t e sondern auch zu sehr abweichenden B e g r i f f s - Vermittelungen, greifen, d.h., anders ausgedrückt, zu S y n o n y m i e n von innerlich mitunter aufs äußerste unter sich disparatem e t y m o l o g i c h e n Werthe, welche - deffenungeachtet- in ihrem Gegenstande, wo nicht sich decken, doch als in ihrem gemeinshaftlichen Z i e l p u n k t e zusammentreffen müssen (Pott 1860: 256).

On the other hand, it can be of equally little surprise if entirely different languages resort to not only completely different s o u n d s, but also to very differing concept-arrangements to designate the same object, i.e., in other words, to s y n o n y m i e s of internally at times extremely disparate e t y m o l o g i c a l value, which, in spite of that, if they do not coincide, have to converge with regard to their subject matter in their common goal.

[A]lle Benennung von Substanzen geschieht immer nur fragmentarisch, gleichsam als müßte ein Bruchtheil (ein Merkmal, Epithet) stellvertretend die alleinige Pathenfchaft für das Ganze (die Substanz als Inbegriff einer Vielheit von Merkmalen) übernehmen und ihm f e i n e n Namen leihen. Die große Mannichfaltigkeit von Namen, die ein Ding haben kann, rührt eben daher, daß man bei der Benennung bald auf dieses bald auf jenes Merkmal (es hat aber deren eine große Menge) fein Augenmerk richten kann ... (Pott 1860: 345).

Every designation of substances always occurs solely in a fragmentary way, as if a fraction (a characteristic, epithet) had to take over representatively the godfatherhood for the whole (the substance as epitome of a multiplicity of characteristics) and lend it i t s name. The great multifariousness of the names a thing can have even stems from the fact that one can turn one's attention in designating either to this or to that characteristic (of which there is a large number).

Pott goes on to give a number of examples for a selection of concepts from different semantic domains for what he means, using data from a wide range of languages, given the time in which he is writing. For instance, he cites several equivalents for the concept ‘bat,’ which is expressed in some languages with reference to the fact that these animals usually begin their activities in the evening (such as Latin *vespertilio*, which contains *vesper* and Danish *aftenbakke*, which contains *aften*, both meaning ‘evening’), whereas other languages employ “Benennungen, worin das Flattern ... hervorgehoben wird” / “denominations wherein the fluttering is highlighted,” such as German *fledermaus* and Dialectal Spanish

raton volante, literally ‘flying mouse,’ and still others make reference to the animals’ leathery wings as opposed to birds’ feathers, like Sanskrit *ajinapattra* (“Hautflügler”) and Hungarian *bőr-eger*, literally ‘leather mouse.’ Setting an even broader agenda, Pott outlines a research program consisting of gathering similar data for more concepts from a wide array of languages in order to thus establish something like a natural ontology of how humans perceive the world that surrounds them, as represented by their languages:

Nicht minder würde eine Sammlung der von einem N a t u r g e g e n f t a n d e in den verschiedenen Sprachen üblichen Benennungen gewissermaßen den Dienst leisten einer Art Naturbeschreibung desselben, die, wenngleich nicht auf wissenschaftlicher, doch im Uebrigen oft auf äußerst scharfer und naturgetreuer Beobachtung ruht. Nur müßte man sie erst aus allen Winkeln und von aller Welt Enden her zusammenlesen, weil in jedem einzelnen Namen dem Gegenstande doch nur e i n e, wenn auch an sich sehr hervorpringende und charaktervolle Seite abgewonnen worden (Pott 1860: 345).

Just as well a collection of the conventional designations for a natural object in the different languages would to a certain extent render the service of a sort of a natural description on it which rests, albeit not based on scientific observation, but nonetheless on acutely sharp and lifelike observation. One would only first have to glean it from all corners and all ends of the world, because in every single name only one, albeit an in itself very salient and characteristic aspect is wrested from the object.

Of course, at the time Pott wrote access to information about remote languages was extremely restricted, and today one encounters a much better, albeit not ideal, situation to assemble data “von aller Welt Enden her” / “from all ends of the world,” which makes Pott’s achievements even more remarkable.

Interestingly, Pott and other völkerpsychologists (like e.g. Lazarus and Steinthal 1860) also explicitly refer to the Humboldtian notion of *innere sprachform*, which Pott summarizes as “die der Benennung zugrunde liegende concrete und partielle Anschauung” / “the concrete and partial conception which underlies denomination” (1860: 358), thus situating it exclusively in the domain of the lexicon and not in the grammar. Pott presupposes *innere sprachform* to be known to the reader in this interpretation.⁵ This adoption of the (partial) identification of *innere sprachform* with the “Anschauung” putatively enclosed in a language’s lexicon is also present in the work of the founding father of the völkerpsychologie movement, Wilhelm Wundt. Wundt developed a dichotomy between “concrete” and “abstract” thinking, which is conceived of by Wundt as one dimension of *innere sprachform* and can, according to him, be established by investigating the lexical characteristics of languages of different peoples. The former type of thinking is, in his opinion, found in so-called primitive societies, the latter in the more advanced languages of the “civilized” western societies (Wundt was one of the last defenders of the view that languages develop step by step to a more perfect level, the most advanced level

⁵ Probably the last thing linguistics needs is yet another opinion on *innere sprachform*, but the interpretations by earlier scholars as well as certain passages in Humboldt’s work themselves point in the direction that the same notion was at the core of the original conception of *innere sprachform* as well.

being represented by the Indo-European languages). Among the characteristics associated by Wundt with “concrete thinking” are the following:

Die Erscheinungen sind darum von doppelter Art: sie bestehen erstens in dem Mangel zusammenfassender Bezeichnungen für verwandte Vorstellungen, und zweitens in der Substitution bestimmter Einzelvorstellungen, denen irgend ein allgemeiner Begriff als Merkmal zukommt, für diesen Begriff selbst. Konkrete Ausdrucksweisen der ersten Art sind es z.B., wenn eine Sprache den Menschen nicht als allgemeinen Gattungsbegriff, sondern nur in seinen besonderen Arten, als Mann, Weib, Kind u. dgl. kennt; solche der zweiten Art, wenn sie die Zahl ‘vier’ durch ‘Zehen des Straußes’, ‘fünf’ durch ‘Hand’, ‘zwanzig’ durch ‘Mensch’ bezeichnet (Wundt 1904: 443-444).

The phenomena are therefore of a double nature: they first consist in a lack of abstracting designations for related conceptions, and second in the substitution of certain individual conceptions, which are characterized by some general notion, for this conception itself. Concrete terminologies of the first kind are if for instance a language does not know the human being as a generic term, but only in its particular kinds, such as man, woman, child, and the like; those of the second kind, if it designates the number ‘four’ by ‘toes of the ostrich,’⁶ ‘five’ by ‘hand,’ ‘twenty’ by ‘human being.’

In effect, Wundt assumed, first, that when terms for which a conceptual source different from their own meaning can be indicated, this source plays a fundamental role in the constitution of the meaning (the ways in which it is “thought of”). This problematic equation of literal meanings, as found in languages of different peoples, with thought is, however, not at all a new nuance of the idea in Wundt. As seen earlier, such an equation is implicitly made as well by most earlier writers that were discussed, and it can be traced through the centuries along with the idea itself. Second, according to Wundt, from the presence of many such cases in a given language one can infer that the people speaking it have not yet made the transition to the allegedly more advanced modes of thinking as found in the more “abstract” European languages. This problematic idea will not be dealt with any further; it is sufficient to note that lexical data from languages which have something to do with the topic of this work play a crucial role in Wundt’s theorizing. Indeed, the discussion so far has shown that the bold conclusion that the aspects highlighted by the (different) conceptualizations in complex expressions can reveal something about the way speakers think have left traces through centuries of reasoning on language and its relation to culture and cognition (see chapter 6 for some more cautious thought on what evidence is needed for such claims on the basis of the data collected for this study).

⁶ Wundt does not mention the language in which this etymology is found, nor does he quote a source for this example. The source is likely Dobrizhoffer (1822: 169), who states that the South American language Abipón (Guaicuruan family) has only numerals up to three and that the speakers “make up for the other numbers by various arts: thus, *Geyenk ñatè*, the fingers of an emu, which, as it has three in front and one turned back, are four, serves to express that number.” Dobrizhoffer is quoted in Tylor (1871), a widely read book in the 19th century, and it is likely that this example made its way into Wundt’s work via Taylor. Incidentally, there is no mention of such a denomination in the dictionary part of Najlis (1966), where Abipón is said to have two stems for the numeral four neither of which resembles remotely the term mentioned by Dobrizhoffer.

In a different context, namely in a more general discussion of principles according to which objects are named, Wundt presents different examples for differing conceptualization strategies for the same concept similar to the one found e.g. in Pott (1860):

So ist die *Erde* dem Römer die *trockene*, wohl im Gegensatz zum Meere (*terra* = **tersa* verwandt mit *torrere* dörren), dem Griechen die fruchtbare (γῆ, γαῖα, vielleicht verandt mit γύα Saatfeld), dem Germanen die *bewohnte* oder *bebaute* (ahd. *ērda*, wohl zusammenh. mit *artôn*, bewohnen, bebauen, lat. *arare*) (1904: 498).

Thus the *earth* is for the Roman the *dry one*, probably as opposed to the sea (*terra* = **tersa*, cognate with *torrere* ‘desiccate’), for the Greek the *fertile* (γῆ, γαῖα, perhaps cognate with γύα ‘seed plot’), for the Teuton it is the *inhabited or cultivated* (Old High German *ērda*, arguably associated with *artôn*, ‘inhabit, cultivate,’ lat. *arare*)⁷

In addition to merely presenting data from different languages, Wundt also develops a psychological account of the phenomena recurring to the notion of apperception (first used by Leibniz), which according to him governs the naming process by selecting a salient feature of the object to be named which is then fused in language with the conception of the object itself:

In jedem Fall bezeichnet also das Wort eine zusammengesetzte Vorstellung, innerhalb deren ein Bestandteil im Augenblick der Benennung als der dominierende apperzipiert wurde (1904: 499).

Thus in any case the word designates a composite conception, within which a component part has been apprehended in the moment of designation as the dominant one.

Wundt calls the feature of the object selected for naming the dominating feature (“dominierendes Merkmal”). Importantly, there is, in Wundt’s account, a fusion of the semantics of the dominating feature selected in the process of apperception, and the object to be named.

Wundt’s (and his predecessors’) view found a profound critic in Anton Marty, a pupil of Franz Brentano, writing about three decades later. Marty criticized, often for very good reasons, almost every aspect of Wundt’s work. Although he adheres to the notion of *innere sprachform* in principle as further developed by the völkerpsychologists as well, he has a very different idea as to what amount of importance should be assigned to the source concepts used to conceptualize meanings in Wundt’s “concrete thinking” and the role they can play in determining the psychological characteristics of the people using them. Marty effectively denied that a position with respect to object naming such as Wundt’s, in which there is no clear semantic distinction between the conceptualization process and the semantics of the term, is defensible at all:

⁷ While the connection between Latin *terra* and *torrere* is corroborated by modern research (Wodtke et al. 2008: 701), the Greek and German etymologies proposed by Wundt seem uncertain (for the latter see Kluge 2002, s.v. *Erde*).

Vor allem gehört die Vorstellung 'Zehen des Straußes', 'Hand' usw. hier nicht zum Inhalt des durch die Sprache ausgedrückten Denkens, wie ich schon anderwärts ausführlich dargetan. Inhalt ist der Begriff 'vier', 'fünf' usw. ebenso gut wie wenn wir die Namen 'vier', 'fünf' usw. gebrauchen. Damit ist aber nicht gesagt, daß 'Zehen des Straußes' etwa eine Denkform für diesen Inhalt sei. Es gehört vielmehr überhaupt nicht zum Gedachten im Sinne der Bedeutung; die Vorstellung 'Zehen des Straußes' ist eine zur Vermittlung des Verständnisses dienende Begleitvorstellung ... also ein Stück Ausdrucksmittel, nicht zur Bedeutung gehörig, weder als Form noch als Inhalt. Wenn man sich manchmal mit Rücksicht darauf, daß diese für die gleiche Bedeutung des Verständnis vermittelnder Bilder in verschiedenen Sprachen verschieden sind, so ausdrückt, daß man sagt, die eine Sprache fasse den Begriff so, die andere anders auf, oder die eine denke in dieser, die andere in anderer Form, so kann mit diesen verschiedenen 'Denkformen' eben nur ein verschieden sprachliches, d.h. zu den Mitteln der Verständigung gehöriges Denken gemeint sein, nicht ein solches, das irgendwie die Bedeutung bildete (1950: 62).

First of all, the conception 'toes of the ostrich,' 'hand' etc. does not belong to the content of thought as expressed by language, as I already demonstrated at length elsewhere. The content is the concept 'four,' 'five,' etc. just as if we use the names 'four,' 'five,' etc. This does not however entail that 'toes of the ostrich' is a form of thought for this content. In fact it does not belong at all to that which is thought in the semantic sense; the conception 'toes of the ostrich' is a subsidiary conception that serves to mediate understanding ..., a piece of expressive means, not belonging to semantics, neither as form nor as content. If one sometimes articulates oneself with respect to the fact that these images mediating understanding are different in different languages to the effect that one language conceives of the notion in this way, another in a different way, or one language thinks in this, another in a different form, then what can be meant by different 'modes of thought' can only be a different linguistic thinking, i.e. one pertaining to the means of communication, not one that in any way constitutes meaning.

To distinguish his conception from the older Wundtian view, which, like Humboldt, subsumed a wide array of very different points under the general label *innere Sprachform*, he refers to it as "figürliche innere Sprachform" / "figurative inner form," meant to refer only to the aspect of the notion discussed above and nothing else. It is here that the Wundtian notion of the dominating feature is at home (Marty 1908: 581, on the confusion of lexical motivation with semantics, see also Alinei 1997). Marty (1908) also elaborates on this notion, by addressing the differences and similarities found in the source concepts involved across languages (interestingly, Marty 1908: 177 already suggests the possibility that the relations of these to the target concept may be described by contiguity and similarity). As examples, he is adducing the cases of the different concrete sources for the meanings 'to think,' and, in a more detailed account, 'perhaps':

Daneben aber besteht eine Großzahl von Fällen, wo die innere Form bei verschiedenen Sprachen anders und anders geartet ist und bloß der allgemeinsten Methode nach übereinstimmt. Ich erinnere beispielsweise an die von verschiedenen physischen Vorgängen hergenommenen Bilder, womit da und dort derselbe psychische Vorgang (vgl. „Denken“ bald durch das Bild von einem Zusammenschütteln oder -bringen, bald von einem Wägen, bald von einem Teilen und Ausscheiden usw. usw.) umschrieben wird. ... daß, was wir durch „vielleicht“ (= sehr leicht) ausdrücken, im Griechischen mit *ταχα* (hergenommen von *ταχύς*) oder *ἴσως* (hergenommen von den nach beiden Seiten gleichen

Chancen), im Englischen mit *perhaps* (zusammenhängend mit *hap*, der Zufall), im Spanischen mit *a caso* (zusammenhängend mit *casus*), im Lateinischen mit *forsitan* (*forssit an*) wiedergegeben wird ... Diese Beispiele von inneren Sprachformen, die bei gleicher Bedeutung in verschiedenen Sprachen differieren und wofür sich die Beispiele ins Endlose vermehren ließen, sind besonders geeignet, die Verschiedenheit jener wechselnden Begleitvorstellungen von der überall identischen Bedeutung vor Augen zu führen, und umgekehrt der Fall, wo dieselbe innere Sprachform da und dort den Vermittler für verschiedene Bedeutungen bildet (1908: 141).

Along with this, there is a big number of cases in which the inner form is diverse and differently natured and only concurs in the general method. I call to mind for instance the images, taken from different physical processes, by which here and there the same mental process is circumscribed (cf. 'thinking' by an image of shaking or bringing together, from weighing, or from separating or dividing etc. etc.). ... that that which we express by *vielleicht* (=very light) is rendered in Greek by *ταχα* (taken from *ταχύς*) or *ἴσως* (taken from equal chances on both sides), in English by *perhaps* (connected to *hap*), in Spanish by *a caso* (connected to *casus*⁸), in Latin by *forsitan* (*forssit an*)⁹ ... These examples of inner forms that differ while the meaning is the same and for which examples could be multiplied ad infinitum are especially suited to bring home the diversity of the protean subsidiary conceptions of the semantics which is the same everywhere, and conversely the case in which the same inner form constitutes the facilitator for different meanings here and there.

However, in a short passage, Marty mentions that there even may be some truth to the original conception of *innere sprachform*, in that there indeed may be similarities in one language or language family, something like a conceptual fingerprint, when it comes to the selection of source concepts:

Das Wahre an jener Rede von einer inneren Form in einer gewissen Sprache ist das, daß die dahin gehörigen Erscheinungen bei verschiedenen Ausdrucksmitteln derselben Sprache oder Sprachenfamilie unter sich vielfach Züge der Übereinstimmung, wo nicht etwas wie einen einheitlichen Stil zu zeigen pflegen (1908: 142).

The truth in this talk about inner form in a certain language is that the phenomena pertaining to it tend to exhibit among themselves, considering the different means of expression in the same language or language family, traits of agreement, if not something like a uniform style, in many cases.

Unfortunately, Marty does not elaborate further on what precisely it is that he is alluding to; no examples are provided to illustrate his line of thought. For a more detailed overview of Marty's philosophy of language, see Funke (1924/1974).

⁸ In fact the Spanish form is *caso*; *casus* as quoted by Marty is the Latin form to which it goes back. The *innere sprachform* here is that *casus*, in Latin, is connected to the verb *cadere* 'to fall,' i.e. the conceptualization of 'perhaps' here is one of (accidentally) falling somewhere at random.

⁹ *Forsitan* is a contracted, lexicalized form of *forssit an*, which is in fact a phrase consisting of *fors* 'fate,' the 3rd singular conjunctive present tense form of the copula plus the subordinating conjunction *an*, and could be translated as something like "be the fate that..."

2.5. ONOMASIOLOGY

The transition from what may be called pre-modern linguistic reasoning to onomasiology is not as clear-cut as the division in sections made here might suggest. This may have something to do with the fact that onomasiology is essentially non-structuralist in nature and has therefore not experienced as dramatic changes in theory with the advent of structuralism (see Kramer 2000 for an outline of its development). Indeed, many onomasiological works retain the same underlying assumptions taken for granted by earlier writers like those discussed above. The basic task of onomasiology, in the words of Zauner (1902: 4), who also coined the term in the first place (although even earlier works such as Diez 1875 and Tappolet 1895 already assumed essentially the same perspective), is to take “den Begriff zum Ausgangspunkt” / “the concept as the starting point” and to determine “welche Bezeichnung, Benennung die Sprache für diesen Begriff habe” / “which denomination and designation the language may have for this concept,” and in a second, more analytic step, “zu ergründen, warum die Sprache dieses oder jenes Wort zur Benennung dieses oder jenes Begriffes verwendet” / “to determine why the language utilizes this or that word to designate this or that concept.” In their empirical work, Diez, Tappolet, and Zauner were, aside from outlining the new approach to the study of the lexicon, concerned with different semantic fields in Romance languages: Tappolet (1875) investigates kinship terms and Zauner (1902) body part-terms, also under diachronic aspects. Work in the onomasiological tradition in the first half of the 20th century, largely carried out by German-speaking scholars, has spawned a huge amount of literature investigating individual “benennungsgründe”¹⁰ (roughly, “naming rationale”) for concepts in languages of a certain area or family (see Grzeg 2009 for an extensive bibliography).

¹⁰ In fact, this term is a fine example to illustrate how onomasiology inherited its notional apparatus from works at the dawn of modern linguistics. “Benennungsgründe” can at least be traced back to Bopp (1836: 136), who suggested that the purpose of etymology be

dafs man, so weit es möglich ist, einem jeden Worte die Gesetzmäßigkeit seiner Bildung nachweist, ihm gleichsam seinen Lebenslauf zur Seite stellt, sein Aussehen in früheren Perioden, d.h. in älteren stammverwandten Sprachen beschreibt, und durch die Zusammenstellung der sich wechselseitig aufklärenden Formen die echtste, ursprünglichste von allen ermittelt, und hierdurch häufig den Benennungsgrund eines Gegenstandes aufdeckt, und so einerseits die der Sprache innewohnende Philosophie, die Sinnigkeit ihrer Uranschauungen, und andererseits die Regelmäßigkeit und Natürlichkeit ihrer physischen Einrichtung, so wie die einfachsten Elemente ihres Ganzen an das Licht zieht.

that one, as far as possible, detects the regularity of each word's formation, and that one so to speak provides it with its vita, describes its appearance in earlier periods, i.e. in older genetically related languages, and determines, by compiling the forms that illuminate themselves mutually, the most original, pristine one of them all, and thereby one often lays bare the naming rationale of an object, and so sheds light on the one hand on the philosophy that indwells the language, the meaningfulness of its primordial conception, and on the other hand the regularity and naturalness of its physical composition, as well as the simplest elements of its whole.

Thus, it is clear that, for Bopp, the task of etymology is intricately connected to the question of how languages verbalize experience and its relevance for presumed differences in thought.

While onomasiological works are often characterized by particularism with respect to the meanings investigated and are restricted to individual case studies on a small scale, at least some writers at the same time outline broader research agendas. Indeed, Tappolet (1895: 2) suggests a new research branch he calls “*vergleichende Lexikologie*” (“comparative lexicology”) which is based on onomasiological principles and seeks to elucidate naming motives in different languages for the same concepts. This is obviously a programmatic extension of the task already inherent in the approach of earlier writers, such as Pott.

2.6. STRUCTURALISM

Lexical motivation also had a role to play in structuralist thinking. It is relatively unknown when compared with the huge impact of the Saussurean doctrine of the arbitrariness of the linguistic sign that Saussure introduced the notion of the motivation of the linguistic sign into the scientific discourse at the same time. Saussure (1916/1967: 180-181) writes:

Le principe fondamental de l'arbitraire du signe n'empêche pas de distinguer dans chaque langue ce qui est radicalement arbitraire, c'est-à-dire immotivé, de ce qui ne l'est que relativement. Une partie seulement des signes est absolument arbitraire ; chez d'autres intervient un phénomène qui permet de reconnaître des degrés dans l'arbitraire sans le supprimer : *le signe peut être relativement motivé*. Ainsi *vingt* est immotivé, mais *dix-neuf* ne l'est pas au même degré, parce qu'il évoque les termes dont il se compose et d'autres qui lui sont associés ... Il en est de même pour *poirier*, qui rappelle le mot simple *poire* et dont le suffixe *-ier* fait penser à *cerisier*, *pommier*, etc. ...

The fundamental principle of the arbitrary nature of the linguistic sign does not prevent us from distinguishing in any language between what is intrinsically arbitrary - that is, unmotivated - and what is only relatively arbitrary. Not all signs are absolutely arbitrary. In some cases, there are factors which allow us to recognise different degrees of arbitrariness, although never to discard the notion entirely. *The sign may be motivated to a certain extent*. The French word *vingt* ('twenty') is unmotivated, whereas *dix-neuf* ('nineteen') is not unmotivated to the same extent. For *dix-neuf* evokes the words of which it is composed, *dix* ('ten') and *neuf* ('nine') and those of the same numerical series ... The same is true of *poirier* ('pear-tree'), which evokes the simple form *poire* ('pear') and has a suffix *-ier* which recalls that of *cerisier* ('cherry-tree'), *pommier* ('apple-tree'), etc. (Harris 1983: 130)

According to Saussure, complex expression, such as *dix-neuf* 'nineteen' and *poir-ier* 'pear tree' are thus relatively motivated by virtue of the fact that their meaning is constituted in some unspecified manner. As the last above quoted passage suggests, this happens in what Saussure (1916/1967) calls “*rapports associatifs*,” that is, by paradigmatic interconnections to signs that are either similarly formed, similar semantically, or both. Alinei (2001) raises the question as to who introduced the term *motivation* into linguistics. It is probable that Saussure did not invent the term, but rather was influenced by earlier writers. Kerner (1971: 165fn38) points to a similar usage of the term in Kruszewski (1890). The ultimate source of the term should, however, as it seems, be sought in philosophical writings widely read in intellectual circles around 1900. In Franz Brentano's (1956: 128) theory of mental judgements, one finds the statement: “*Motiviert ist ein Urteil, wenn es unmittelbar von einem anderen psychischen Phänomen verursacht wird und wir diese Verursachung*

wahrnehmen” / “a judgement is motivated if it is caused directly by another psychic phenomenon and if we perceive this causation.” Given the psychological flavor of Saussure’s account of relative motivation and the *rappports associatifs* and of Kruszewski’s treatment of linguistic change, it seems likely that Brentano is the source from which Saussure, either directly or indirectly via Kruszewski, borrowed the notion of motivation and applied it to linguistic questions.

Even more important than the mere introduction of the idea of relative motivation, however, is that Saussure also outlined a rudimentary typology with respect to the degree to which languages utilize arbitrary and relatively motivated lexical items and suggests that this is an important property that may be used to establish typological groupings:

Il n’existe pas de langue où rien ne soit motivé ; quant à en concevoir une où tout le serait, cela serait impossible par définition. Entre les deux limites extrêmes – minimum d’organisation et minimum d’arbitraire – on trouve toutes les variétés possibles. Les divers idiomes renferment toujours des éléments des deux ordres – radicalment arbitraires et relativement motivés – mais dans des proportions très variables, et c’est là un caractère important, qui peut entrer en ligne de compte dans leur classement. En un certain sens – qu’il ne faut pas serrer de trop près, mais qui rend sensible une des formes de cette opposition –, on pourrait dire que les langues où l’immotivité atteint son maximum sont plus *lexicologiques*, et celles où il s’abaisse au minimum, plus *grammaticales* (Saussure 1916/1967: 183).

There exists no language in which nothing at all is motivated. Even to conceive of such a language is an impossibility by definition. Between the two extremes –minimum of organisation and minimum of arbitrariness- all possible varieties are found. Languages always exhibit features of both kinds – intrinsically arbitrary and relatively motivated – but in very varying proportions. This is an important characteristic, which may have to be taken into account in classifying languages. In one sense –this must not be pressed too far, but it brings out one aspect of the contrast – a distinction could be drawn between lexicological languages, in which absence of motivation reaches a maximum, and *grammatical* languages, in which it falls to a minimum (Harris 1983: 131-132).

Saussure goes on to purport that German, when compared with English,¹¹ is closer to the lexicological pole on the continuum of lexicological versus grammatical languages. As an example of “l’ultra-lexicologique,” that is, of an “ultra-lexicological” language, he cites Chinese, and as “spécimens de l’ultra-grammatical” / “exemplars of the ultra-grammatical” he cites Indo-European (apparently the Proto-Language is meant) and its early descendant Sanskrit. Interestingly, despite the purported largely ahistorical perspective of Saussurean structuralism, Saussure even suggests that languages may shift their position on the lexicological-grammatical continuum by diachronic change (see Urban 2008 for empirical diachronic data for Latin and Spanish):

¹¹ See Scheidegger (1981) for an evaluation of the alleged higher degree of motivated lexemes in the Saussurean sense in German when compared with French.

Dans l'intérieur d'une même langue, tout le mouvement de l'évolution peut être marqué par un passage continu du motivé à l'arbitraire et de l'arbitraire au motivé ; ce va-et-vient a souvent pour résultat de déplacer sensiblement les proportions de ces deux catégories de signes Saussure (1916/1867: 184).

Within the same language, a whole evolutionary trend may be marked by constant movement from motivation to arbitrariness, and vice versa. The result of this to-and-fro is often a noticeable shift in the proportions of the two categories of sign. (Harris 1983: 132).

Saussure's typology *in statu nascendi* was taken up and elaborated on at various points by Stephen Ullmann, who is therefore sometimes credited to be "[o]ne of the founding fathers of lexical typology" (Koch and Marzo 2007: 260). Ullmann (1962) distinguishes three types of motivation: phonetic motivation (onomatopoeia and sound symbolism), morphological motivation (derivatives and compounds), and semantic motivation (metaphorical extensions, such as that from 'hood' to 'hood of car'). As for morphological motivation, Ullmann (1962: 91) remarks that "in many cases the connexion [sic!] between the two elements may be remote or obscure, as for instance in *butterfly*, *kingfisher*, or *lady-bird*, but it is none the less obvious that such words are morphologically motivated." Ullmann (1962: 91) concedes that particular words may be motivated in more than one way: "The plant name *blue-bell*, for example, has such mixed motivation: it is a transparent compound and at the same time a metaphor based on the bell-like shape of the flower." Ullmann (1962: 93) further makes clear that the locus of analysis is, or should be, judgements by speakers: "For a word to be so motivated, it must be felt to be a compound, a derivative, or a figurative expression. Once again it might be possible to devise a statistical method in order to determine, in marginal cases, how far people are aware, or can be made aware, of the motivation of such words." Ullmann thus broadens the Saussurean notion of relative motivation, which he identifies with his morphological motivation, by recognizing phonetic and semantic factors as distinct types of lexical motivation. Note, however, that Saussure's concept of relative motivation is not reducible to morphological factors alone in spite of their important role, but has, as seen, a distinct psychological component built into it. To this extent Ullmann also altered the original Saussurean conception in a significant way.

Ullmann is very interested in the typological aspect of the distinction between motivated and arbitrary words as formulated by Saussure and calls this "one of Saussure's most important discoveries" (1962: 105). He suggests differences between languages of the different types with respect to the degree to which loanwords are accepted into the language (1962: 112) and ponders the possibility of and reasons behind similar metaphorical processes in unrelated languages across the world (1966: 238). However, Ullmann, like Saussure, only cites random examples anecdotally to make a case for one language or another being relatively motivated or not, and restricts himself to suggestions for further work while at the same time noting potential difficulties with non-morphological motivation:

[T]hough one may have some quite definite impressions about the frequency of onomatopoeia or metaphor in a given language, it would be difficult to formulate them with any

degree of precision. With morphological motivation one is on firmer ground: it is the most clear-cut and least subjective of the three types, and certain broad tendencies stand out very clearly even though they may not be statistically formulable (Ullmann 1962: 105).

In a later publication, Ullmann goes one step further in specifying how one might go about testing the degree of motivated and arbitrary terms in a given language:

It might be possible to devise some statistical test for these relative frequencies. Such a test might be based on samples from dictionaries, on a representative selection of texts, or on both. Such isolated numerical data as are already available seem to be very suggestive (1966: 223).

As is obvious, this is precisely the task of the present study!

Further structuralist work on lexical motivation includes Gauger (1971) and Rettig (1981) among others, which are not discussed here at length because they are not concerned with cross-linguistic questions or make theoretical contributions that are relevant to structuralist thinking in particular. An independent account of lexical motivation that takes Saussure's writings as its starting point is represented by Alinei (1996, 1997, 2001), among other publications. Alinei proposes that research into lexical motivation, for which he suggests the term *iconymy*, should form an autonomous subdiscipline of linguistics. Next to a short account of the role motivated terms have to play in language, Alinei (2001: 92-93) in particular offers a rendition of the by now well-known notion of choosing different aspects of the object for its linguistic designation:

In the case of 'eyeglasses', for example, each iconym collapses and represents a sort of encyclopaedic [sic!] definition of 'glasses', which can be something like 'device consisting of a pair of crystal round lenses to improve human vision mounted in frames held on the bridge of the nose with sidepieces to grip the temples; originally beryl was used etc.'. Out of this definition, one can choose, arbitrarily, 'glass', 'crystal', 'beryl', 'hook', 'eye', 'lens' etc., as a condensed representative of the whole concept. Also French *lunettes* 'little moons' is based on one of the components of the encyclopaedic definition, namely 'round (lens)', but is metaphorical (associative) in nature, and not merely descriptive. Notice that the choice of iconyms is always arbitrary, as it is made from within a practically unlimited set of conceptual candidates and/or their metaphoric equivalents.

Next to the interesting claim that languages arbitrarily pick one or the other bit of the encyclopedic knowledge about the object to be designated, Alinei goes on to sharpen the theoretical distinctions between strategies in which the component chosen for the lexical designation "belongs to the structural paradigm of the designandum" and those belonging to a "different conceptual sphere," such as French *lunettes*, which are said to be "metaphoric in kind." A large-scale project initially headed by Alinei that is still ongoing is the *Atlas Linguarum Europae*, commencing with the publication of Alinei (1983). The aim of this project is to examine the denominations of an impressive variety of concepts across languages of Europe in the form of maps and accompanying datasets.

2.7. LINGUISTIC ANTHROPOLOGY

Lexical motivation, both in the form of polysemous and morphologically complex expressions, has a quite important role to play in the investigation of ethnobiological taxonomies, in particular in their historic developments, although other terms are traditionally used by researchers in this area to refer to the phenomena (“unitary labels” is typically used for simplex terms and “overtly marked” terms for morphologically complex expressions).¹² Berlin (1972), in a seminal paper, demonstrates that, when terms for erstwhile unlabeled higher ranks in the taxonomy, such as the life-form rank (corresponding to English *bird*) and the unique beginner rank (corresponding, roughly, to English *creature*), are developed in a language, these either arise in the form of semantic expansion (i.e. development of polysemy) of a lower-level term, or are (at least) initially expressed by morphologically complex terms.

Apart from the realm of ethnobiological classification, important research on regularities of lexical motivation, with an explicitly cross-linguistic orientation, was carried out by the anthropological linguists Cecil H. Brown and Stanley R. Witkowski, who published a series of studies in the early 1980s. Importantly, work by these scholars not only makes empirical observations, but usually also attempts to come up with an explanation for each pattern, which typically recurs to language-independent cultural factors.

Witkowski et al. (1981) argue that terms for ‘tree’ are relatively recent additions to the lexicon in many languages and that “thousands of years ago most languages lacked a ‘tree’ category” (Witkowski et al. 1981: 10). They hypothesize that the development of terms for this concept is triggered by increasing societal complexity. Linguistically, they suggest that ‘tree’ terms arise as an additionally encoded meaning of terms for ‘wood’ with “low salience” and present some cases of morphologically complex terms for ‘tree’ based on ‘wood’ which they interpret to the effect that this “may constitute an incipient phase in the separation of ‘wood’ and ‘tree’ referents” (Witkowski et al. 1981: 9). Similar points are made for languages which conflate lexically the meanings ‘eye’ and ‘face’ and ‘seed’ and ‘fruit’ respectively in Brown and Witkowski (1983).

Witkowski and Brown (1985) examine the areal distribution of languages without lexical differentiation between ‘hand’ and ‘arm’ and ‘foot’ and ‘leg’ respectively, and establish that such languages dominate in regions close to the equator. They (1985: 207) speculate that “an important influence on the occurrence of limb polysemy in languages is the existence of extensive wearing apparel in societies, especially tailored clothing covering the limbs and other limb gear” (see also Brown 2005b). Brown (2005a) investigates this situation with respect to the referents ‘finger’ and ‘hand’ and suggests that languages without any lexical differentiation for these referents are typically hunter-gatherers societies because they “differ from agrarians in the extent to which they make use of finger adornment,” which is taken as an explanation of the observed patterns.

Further, Brown and Witkowski (1981) examine metaphorical denomination strategies (which they refer to as “figurative”) for certain parts of the body, such as ‘finger’ and ‘toe,’ ‘pupil of the eye,’ ‘muscle,’ and ‘testicle.’ More than other studies, this one focuses on

¹² Berlin (1992), however, discusses the relation of ethnobiological nomenclature with the traditional distinction between arbitrary and motivated.

the striking cross-linguistic similarity of these metaphor-driven strategies (observed are “child of hand/foot” for ‘finger’ and ‘toe,’ “person of the eye” for ‘pupil,’ “mouse or other small animal (of the arm)” for ‘muscle’ and “egg” for ‘testicle’) and possible approaches to their explanation. In addition to lexical constraints, Brown and Witkowski (1981: 606) note that “[t]he limited number of things in the physical world that resemble or are in some way regularly associated with body parts significantly constrains the types of figurative equations that can achieve currency in a language,” and, in discussing why metaphorical denominations as opposed to non-metaphor-driven complex terms are preferred, claim that the former are “more interesting, fetching, and dramatic” (1981: 607). Brown (1999) examines lexical acculturation, i.e. the process of naming for novel entities encountered in the course of contact with European culture in Native American languages, and likewise notes striking similarities across languages with respect to the linguistic treatment of these entities. Brown (1999) appeals, with reference to work by Chomsky, to a “detailed wiring” approach in cognition as the main explanatory theory, which is, however, not described in great detail. Finally, Brown (1983) examines origins in the words for the cardinal directions across languages, and Witkowski and Brown (1983) demonstrate how “marking reversal,” i.e. the situation in which one referent that was originally designated by a simplex term comes to be expressed by a complex term under the influence of introduction of a new referent that needs to be named, can bring about lexical semantic change. For a concise summary of research in this paradigm, see also Brown (2001).

2.8. MAVERICKS

2.8.1. ZEHETMAYR

Zehetmayr published an “analogically-comparative” dictionary of Indo-European (with an emphasis on Latin, Greek, Sanscrit and Germanic languages) in 1879. Under the label *analogy* Zehetmayr subsumes two different notions: formal analogy on the one hand, by which he understands forms shared by related languages due to common descent as well as formal similarities (e.g., when terms in two languages are formally derived by means of an affix or the like), and “analogy of ideas” on the other. Zehetmayr assigns greater importance and value to the latter, both because of their practical value for etymological research as well as because of their value for something like a “natural philosophy” enshrined in language, an idea also encountered in the writings of Pott; this position is expressed in the following quote from Zehetmayr (1879: iii-iv):

Ungleich wichtiger, als die sprachlich *formale* Analogie, ist die *Ideen-Analogie*, welche es mit dem Grundbegriff zu thun hat, den selbst etymologisch nicht verwandte Wörter aus verschiedenen Sprachen in der Bezeichnung eines Gegenstandes gemeinsam theilen. Die Ideen-Analogie ist die exclusiv philosophische Seite der Linguistik, indem sie auf die primitive Identität im Denken, d.h. in der Vernunft, und noch weit mehr, als die Stammverwandschaft im äussern Wortlaut, womit sich die Etymologie beschäftigt, auf die Einheit unseres Geschlechtes schliessen lässt. Ja, noch mehr: die philosophische Definition nicht weniger Begriffe gewinnt in der Ideen-Analogie einen soliden, sichern, weil positiven Boden, statt in oft schwankenden Subtilitäten sich zu bewegen, so dass sie für Viele nicht

zu einem befriedigenden Abschluss gelangt. ... wo die nach Ort und oft auch nach Zeit von einander entferntesten Völker in der Ideenfassung durch das Wort harmoniren, herrscht so zu sagen Unfehlbarkeit ... Die Ideen-Analogie der Sprache bietet Ueberraschendes in solcher Fülle, dass die Linguistik, die ja selbst wieder für ihre Forschungen bezüglich mancher etymologisch noch nicht feststehender Wörter durch jene Gedanken-Aehnlichkeit auf den oft einzig sichern Standpunkt versetzt werden kann, von wo es sich in Ruhe weiter operiren lässt, unmöglich von Versuchen Umgang nehmen kann, die, wie die vorliegende Schrift, der Ideen-Analogie vorzugsweise ihre Aufmerksamkeit zugewendet hat.

Much more important than formal linguistic analogy is the analogy of ideas, which has to do with the basic concept, which even etymologically unrelated words from different languages have in common in the denomination of an object. The analogy of ideas is the exclusively philosophical side of linguistics, by virtue of which it is possible to deduce primitive identity in thinking, i.e. in reason, and far beyond genetic affinity in the outer shape of words with which etymology deals, the unity of our race. Even further: the philosophical definition of numerous notions attains solid, secure, since positive ground, instead of moving in often unsteady subtle consideration, so as to not reaching a satisfactory completion in the eyes of many. ... where the most remote peoples in terms of location and often also in time harmonize in the conception of ideas by means of the word, there is infallibility, so to speak ... The analogy of ideas of language offers surprising facts in such abundance that linguistics, which itself in turn for its research regarding some words not yet etymologically accounted for can only be put on safe grounds by this similarity in thought, can impossibly dodge attempts which, like the present volume, called attention to the analogy of ideas.

Despite not being on the methodological level of modern Indo-European studies due to its age, Zehetmayr's work offers an impressive amount of data that demonstrates that even the study of one language family can yield interesting semantic parallels that do not appear to be due to common descent in all cases.

2.8.2. SCHRÖPFER

Schröpfer (1979) is the first volume of a monumental, but unfinished, project of a comparative dictionary similar in many ways to Zehetmayr's work as well as to Buck's (1949) *Dictionary of Selected Synonyms in the Principal Indo-European languages*. The first published fascicle is based on data for 28 European languages, deliberately including some that were not featured in Buck's work (Schröpfer 1982: 159), but the dictionary was meant to include in its final form data from as many as 87 languages, including non-Indo-European ones (Schröpfer 1979-1994: xxiv). Its final version was planned to include 3,000 headwords, roughly double the number of Buck (1949). The purpose of such a *vergleichende onomasiologie*, or "comparative onomasiology," which is the programmatic motto chosen by Schröpfer for the dictionary, was to produce a repository of semantic associations and changes not only as a valuable research for etymological research, but also to demonstrate "daß die Benennungsvorgänge, die mit der menschlichen Wahrnehmung-Begriffsbildung innig zusammenhängen, sich in allen Bereichen der Sprache und in allen Zeiten und Räumen ihrer Entwicklung und ihres Gebrauchs wiederholen und Analogieschlüsse zulassen" / "that the processes of denomination, with which the constitution of human perception and concept formation are intimately connected repeat themselves in all areas of languages and in all times and places of its development and usage and allow for conclu-

sions by analogy" (Schröpfer 1974b: 4) as a purpose in itself. In connection with this purpose, it is interesting to note that Schröpfer (e.g. 1979: xlv) uses the Humboldtian term of *innere sprachform*, and that not simply to establish a historical connection with his predecessor, but rather as a matter of course and as a technical term within his framework in connection with the "Frage der Übereinstimmung der Benennungsweise ..., d.h. ... die Frage zugleich der inneren Sprachform" / "question of agreement of the mode of denomination, i.e. simultaneously the question of the inner form of language." The dictionary, unlike Buck (1949), was also meant to feature an analytical framework and not merely list individual denominations. This framework is otherwise heavily influenced by the paradigm of *sprachinhaltsforschung* (e.g. Weisgerber 1971), and features, according to Schröpfer (1982: 163), the four parameters of "Nennwert/Nennfunktion," i.e. the lexical semantics of individual lexemes themselves, "Deutwerte/Deutefunktion," which is meant to represent den "ursprüngliche[n] Versuch, den Gegenstand nach einem später oft verlorenen oder vergessenen Merkmal zu benennen" / "the primordial attempt to name the object for a feature often lost or forgotten at a later point," i.e. the *innere sprachform* inherent in a transparent or etymologizable word, so-called "Nebenvorstellungen," a concept which is again directly taken over from Humboldt himself, as well as a lexeme's "Gefühlswert." As will be noted, the terminology employed by Schröpfer has an archaic feel to it, and it was probably very conservative already even at the point of time the dictionary was conceived of. Nevertheless, Schröpfer's purpose is quite clear and places him in line in a long, albeit somewhat discontinuous tradition. For a condensed outline of the project in English, see Schröpfer (1974a).¹³

¹³ Schröpfer points in various papers to an awareness of differences in lexical motivation and the demand to systematize them on the side of philosophers, referring, among others, to Nietzsche, but without offering more specific references. With respect to Nietzsche, Schröpfer might be referring to the following passage from Nietzsche (2005/1873):

Wir teilen die Dinge nach Geschlechtern ein, wir bezeichnen den Baum als männlich, die Pflanze als weiblich: welche willkürlichen Übertragungen! Wie weit hinausgeflogen über den Kanon der Gewißheit! Wir reden von einer 'Schlange': die Bezeichnung trifft nichts als das Sichwinden, könnte also auch dem Wurme zukommen. Welche willkürlichen Abgrenzungen, welche einseitigen Bevorzugungen bald der, bald jener Eigenschaft eines Dinges! Die verschiedenen Sprachen, nebeneinander gestellt, zeigen, daß es bei den Worten nie auf die Wahrheit, nie auf einen adäquaten Ausdruck ankommt: denn sonst gäbe es nicht so viele Sprachen. Das 'Ding an sich' (das würde eben die reine folgenlose Wahrheit sein) ist auch dem Sprachbildner ganz unfäßlich und ganz und gar nicht erstrebenswert. Er bezeichnet nur die Relationen der Dinge zu den Menschen und nimmt zu deren Ausdrücke die kühnsten Metaphern zu Hilfe. Ein Nervenreiz, zuerst übertragen in ein Bild! Erste Metapher. Das Bild wieder nachgeformt in einem Laut! Zweite Metapher. Und jedesmal vollständiges Überspringen der Sphäre, mitten hinein in eine ganz andre und neue.

We divide things according to their genders; we designate the tree as masculine, the plant as feminine: what arbitrary metaphors! How far flown beyond the canon of certainty! We speak of a 'serpent'; the designation fits nothing but the sinuosity, and could therefore also appertain to the worm. What arbitrary demarcations! what one sided preferences given sometimes to this, sometimes to that quality of a thing! The different languages placed side by side show that with words, truth or adequate expression matters little: for otherwise there would be not so many languages. The 'thing-in-itself' (it is just this which would be the pure ineffective truth) is also quite incomprehensible to the creator of language and not worth making any great endeavor to obtain. He designates only the relations of things to men,

2.8.3. EILERS

Another author with a very clear conception of the theoretical-philosophical and practical-philological value of cross-linguistic research on lexical motivation is the Iranianist Wilhelm Eilers. Given the striking commonalities between Eilers's and Schröpfer's approach that will become clear below, it is worth stressing that they seem to have been entirely unaware of each other's work in spite of the fact that they were publishing their results at roughly the same time. Perhaps surprisingly, Eilers calls his research paradigm, which is already foreshadowed in Eilers (1967), *vergleichende semasiologie* (Eilers 1973a,b), which at first glance suggests a very different conception when compared with Schröpfer's *vergleichende onomasiologie*, given that semasiology and onomasiology are traditionally conceived of as converse viewpoints that can be taken in analyzing linguistic signs (see e.g. Koch 2001). However, the different names Schröpfer and Eilers choose only very superficially conceal the fact that they essentially tackle the very same question, with Schröpfer putting emphasis on the semantics-based (onomasiological) approach to linguistic comparison and Eilers on the commonalities in conceptualization by virtue of the linguistic structure of the respective terms that is revealed by such a comparison. Like Schröpfer, Eilers emphasizes the remarkable finding of commonalities in the semantic associations found in very different languages:

Es ist die Tatsache, daß zwei oder mehrere oft völlig verschiedene Sprachen sich zum Ausdruck eines und desselben Gedankens (Satz oder Wort) einer ganz gleichen oder mindestens doch ähnlichen Vorstellungsweise bedienen. Entlehnung darf dabei nicht im Spiele sein. Handelt es sich doch geradezu um ihren Gegensatz ... : selbstständige Entstehung gleicher kultureller Phänomene an voneinander unabhängigen Orten, aber unter gleichen inneren und äußeren Voraussetzungen (1973b: 11).

It is the fact that two or even more completely different languages utilize a completely identical or at the least similar conceptualization to express one and the same thought (sentence or word). Borrowing must not be involved here. In fact it is a matter of the opposite: autonomous development of similar cultural phenomena in places that are independent of one another, but under similar inner and outer conditions.

Diese höchst bemerkenswerten Ähnlichkeiten der Ausdrucksweise der voneinander räumlich wie zeitlich, besonders aber auch morphologisch und genealogisch entferntesten Sprachen drängt zu der Annahme hin, daß der Sprache als solcher überall, wo Menschen sprechen, gemeinsame Grundzüge innewohnen, daß die Sprachen im philologischen Sinn eine große Einheit bilden, die die Einheitlichkeit des Menschegeistes von den primitivsten Stammesverhältnissen in Afrika und Australien bis zur letzten Hochkultur der Völker Asiens und Europas unwiderleglich dartun (1973a: 10).

These highly remarkable similarities in the modes of expression of spatially and temporally, and especially morphologically and genealogically most separated languages impels

and for their expressions he calls to his help the most daring metaphors. A nerve-stimulus, first transformed into a percept! First metaphor! The percept again copied into a sound! Second metaphor! And each time he leaps completely out of one sphere right into the midst of an entirely different one (Mügge 1964: 177-178).

one to the assumption that common main features inhere in language as such everywhere people speak, and that languages form a large unity in the philological sense, and they substantiate irrefutably the unity of the human mind from the most primitive tribal conditions in Africa and Australia up to the last advanced culture of the peoples of Asia and Europe.

Also like Schröpfer, Eilers emphasized the methodological value of a *vergleichende semasiologie* for etymological research:

Mit Hilfe der semasiologischen Methode lassen sich etymologische Ableitungen aufs neue überprüfen, möglich und wahrscheinlich machen oder eben ganz zurückweisen ... Kehrt die gleiche oder die ähnliche semantische Entwicklung in den verschiedensten Sprachen öfter wieder, so läßt sich auf eine der Menschheit oder Teilen von ihr gemeinsame Vorstellungsweise schließen, und wir dürfen sie auch anderswo erwarten (1973a: 22).

By means of the semasiological method, etymological derivations can be reassessed anew, made possible and likely or be refuted entirely ... If the same or a similar semantic development recurs in very different languages repeatedly, then one can deduce a common mode of conception of mankind or parts of it, and we are entitled to expect it elsewhere as well.

Eilers also produced valuable empirical results mainly based on comparing Indo-European languages with Semitic and languages of the Middle East, in spite of a questionable assumption of the primacy of the abstract over the concrete in language on his behalf (Eilers 1973b: 6) in the light of modern research on diachronic semantics and grammaticalization, which has amassed data suggesting that precisely the opposite direction is preferred. Unlike Schröpfer, Eilers also frequently adduces evidence arrived at by means of etymological reconstruction. Among the commonalities across language families, either in the form of synchronically transparent lexical motivation or etymological lexical connections, Eilers (1973a) mentions the following: ‘lungs’ – ‘light,’¹⁴ ‘eye’ – ‘to see,’ ‘ear’ – ‘to hear,’ ‘liver’ – ‘fat, heavy,’ ‘neck’ – ‘to turn,’ ‘ring’ – ‘finger,’ ‘mirror’ – ‘to see, to look,’ ‘tree’ – ‘to erect, to build,’¹⁵ ‘garden’ – ‘to enclose,’ ‘soul’ – ‘breath, puff,’ ‘wick’ – ‘to twine,’ ‘area, region’ – ‘circle,’ ‘thing’ – ‘property’ – ‘wish, desire,’ ‘thing’ – ‘word,’ ‘river, sea’ – ‘to gleam,’ ‘sun/star’ – ‘to burn,’ ‘tree’ – ‘firewood’ – ‘to burn,’ ‘elm’ – ‘fly/insect-tree.’ It is not possible to either confirm or reject all of those suggestions simply because the sets of investigated meanings are only partially overlapping, but some of Eilers’s suggestion, such as the connection between the ‘lungs’ and ‘light’ can certainly be confirmed as robust (see Appendix E, 122), while for others there is little evidence; for instance, there are no instances of languages in the sample to be described in chapter 3 where the word for ‘river’ or ‘sea’ is synchronically clearly derived from a verb meaning ‘to gleam.’

¹⁴ In the sense of ‘not heavy.’

¹⁵ See Turner et al. (1998: 387) for an approximate Salishan parallel.

2.8.4. SAPIR

Edward Sapir was well aware of differences between languages in the amount of motivated terms they employ, and how such differences might be exploited for linguistic analysis. Sapir (1916/1949: 435) draws attention to the fact that motivated terms are likely to be more recent coinages than unanalyzable words which, “through the destructive agency of gradual phonetic change,” will tend to lose their motivated character, should they ever have had one. Sapir employs this observation to determine “the relative ages of cultural concepts” among communities of North America as one technique of the overall goal Sapir sets for himself in the article, namely to put forward methods to uncover cultural relations between North American communities and to assess their time depth.

However, lexical motivation also seems to have played a role in Sapir’s thinking about the relation of language to culture and vice versa. The following quote from a recently reconstructed lecture series is illuminating in this context:

In two languages one may find the form (sound) and the function (meaning) of elements to be the same but the patterns totally different. It is the internal economy –the configurational analysis– that is completely different in all languages. Suppose, for example, that in language A, the form *wala* means ‘house’ and in language B there is also a form *wala* meaning ‘house’. Yet although the two forms are linguistically and culturally the same they can still be significantly different. Why? Because there may still be a difference in the morphology or configuration of the languages. In language A, *wala* consists of *wa* + *la*. *wa* means ‘to dwell’ and *la* means ‘that which is used’. In language B, however, *wala* is composed from *w-* + *ala* (where *ala* = ‘house’ and *w-* is a prefix marking neuter gender). Thus the two forms are functionally different in the two languages ... Do meanings, as located in the world and its physical characteristics, explain the linguistic configurations in which people talk about them? Although the exigencies of adjustment to the world are fairly uniform –hunger and the search for food, etc. – the languages about these necessities are very different. Meaning or reference are articulated by speech – we don’t know the world before we have speech. If we don’t have symbols, we don’t have meanings (Sapir 2002: 107, indication of editorial additions removed).

The relation of motivated (descriptive) terms with the external environment is also briefly discussed in Sapir (1912). In any case, it is worth noting that lexical motivation as at least an important part of *innere sprachform*, if not largely identical with it, plays a role in the writings of two of the most prominent authors, Humboldt and Sapir, associated with the coming into being of the idea of linguistic relativity. It seems safe to say that differences in conceptualization by means of lexical motivation thus played a hitherto undervalued role in the shaping of conceptions of linguistic relativity.

2.8.5. DESCRIPTIVITY (SEILER 1975)

Seiler (1975) formalizes the notion of “descriptive” words, which has been around as a term used rather informally to refer to a certain kind of analyzable terms at least since Sapir (1912). He observes that

[e]s läßt sich nun in vielen Sprachen beobachten, daß [Namen] für Gegenstände des Denkens und der Welt, einschließlich Personennamen, von [Prädikaten] in ihrer Oberflächenerscheinung, also Verben hergeleitet sind. In dem Maße wie diese Herleitung

eine direkte ist, sind die Benennungen 'deskriptiv'; je indirekter bzw. undurchsichtiger die Herleitung, desto weniger 'deskriptiv' bzw. mehr 'etikettierend' ist die Benennung (1975: 15).

In many languages it can be observed that names for objects of thought and the world, including personal names, are derived from predicates in their surface structure, i.e. from verbs. To the extent that this derivation is a direct one, the denominations are 'descriptive;' the more indirect or opaque the derivation, the less 'descriptive' or more 'labeling' the denomination is.

The connection to the Saussurean dichotomy of arbitrariness and motivation is, as noted by Seiler (1975: 38) himself, obvious, although Seiler allows a rather fluent continuum between more or less descriptive terms. However, Seiler's notion of descriptivity is not equal to sheer morphological complexity, but has two factors built into its definition: (i) the requirement that descriptive terms be derived from underlying predications and hence morphologically from verbs, and (ii) the possibility of a compositional interpretation as a prerequisite for a term to be called descriptive in this sense, while at the same time showing restrictions in its denotational range (Seiler 1975: 45-46). Interestingly, and apparently independently of Saussure, Seiler (1975: 38-39) also alludes to a purported higher degree of descriptivity in his sense in older stages of Indo-European and proposes that highly descriptive languages (as some of the early Indo-European languages) often lack a copula, while those which are less fond of descriptive denominations are more likely to feature one (as most of the modern Indo-European languages).¹⁶ Seiler also briefly discusses the consequences of a high degree of descriptivity in the nominal lexicon to the overall lexicological organization of a language:

Wenn, wie im Cahuilla, ein offenbar beträchtlicher Teil des Gesamtwortschatzes sich 'deskriptiv' aus primitiven Bestandteilen aufbaut, so kann vermutet werden, daß die Anzahl dieser primitiven Terme, aufs Gesamtvokabular gesehen, geringer ist als bei einer Sprache, die das 'deskriptive' Prinzip weniger stark bevorzugt (1975: 50).

If, like in Cahuilla, an apparently considerable portion of the total vocabulary is made up 'descriptively' from primitive parts, then one can conjecture that the number of these primitive terms, with respect to the total vocabulary, is smaller than in a language that favors the 'descriptive' principle less strongly.

There are a number of subsequent studies that work with the notion of descriptivity as outlined by Seiler: Ultan (1975, 1976) proposes a number of metrics to determine the degree of descriptivity in different languages in the domain of body-part terms, and Walter (1976) examines deverbal derivation in German from this point of view; for a redefinition of the notion see Urban (2008).

¹⁶ Nichols (2010) argues for a heavily verb-based lexicon in Proto-Indo-European and hence a "descriptive" nominal lexicon.

2.9 COGNITIVE APPROACHES

The term motivation has come to be used to refer to a number of sometimes only loosely related phenomena¹⁷ (see Radden and Panther 2004a for an overview of different meanings of the term motivation in recent work). Motivation in a broader sense from the perspective of Cognitive Linguistics is the topic of Radden and Panther (2004b), thus considerably broadening the application of the term motivation beyond lexical motivation proper, which was at the core of Saussure's usage of the term. Radden and Panther (2004a: 1) assert that the Saussurean conception of relative motivation "is in the spirit of cognitive linguistics," and provide, taking Saussure as their starting point, an example of a Cognitive Linguistic analysis of compounding, using words for 'screwdriver' from eleven European languages as examples. They point out (2004a: 5) that "[c]ompounds are especially interesting complex expressions in that they are conventional names that highlight conceptual parts of a more complex conceptualization" and observe, applying Lakoff's (1987) Idealized Cognitive Model approach, that the conceptual means "that are chosen for naming purposes may vary from language to language." Thus, they find that languages select only a few of the possible elements in the proposed Idealized Cognitive Model for 'screwdriver': many select the concept 'screw,' such as English *screwdriver* and Italian *cacciavite*, (which is analyzed as a metonymic relation by Radden and Panther 2004a), others select coordinate concepts in the common domain of 'tools' in addition, such as Swedish *skruvmejsel*, literally "screw-chisel" (Panther and Radden 2004a point out the similarity in shape between chisels and screwdrivers), while Portuguese has a name for 'screwdriver' analyzed by Radden and Panther (2004a: 7) as involving metaphor: *chave de fenda* is literally "key of cut." Note that Radden and Panther's analysis, while cast in the modern terms of Cognitive Linguistics and applying its analytic apparatus, is at its essence a modern rendering of the old pretheoretical observation that is by now so familiar: selection of salient features for denomination with cross-linguistic variation as to these features, which is combined, as e.g. in Marty (1908), with an analysis in terms of contiguity-driven metonymy and similarity-driven metaphor, but here as part of a more general theory of Cognitive Linguistics.

2.10. CHAPTER SUMMARY

Leading up to the final discussion of Radden and Panther (2004a), the idea of cross-linguistic differences with regard to aspects (either quantitative or qualitative) of lexical motivation was traced through five centuries, and a striking similarity across authors with respect to their thoughts about the topic emerged, although they seem to have been largely unaware of each other.

While the present study again will use a novel approach to lexical motivation that will be outlined in the following chapter, one of its central concerns is precisely to put these casual observations on a more systematic and empirically sound cross-linguistic

¹⁷ Recently, the topic of cross-linguistic aspects of lexical motivation has also received renewed attention, with a focus on diachronic patterns of semantic association (Zalizniak 2008, Hénault-Sakhno and Sakhno 2005, who stick to a redefined version of the Humboldtian notion of *innere sprachform* and build on diachronic work discussed in Sakhno 1999). See also Stéphane (1997) for a different account of the phenomenon.

basis. In this sense, this study joins its predecessors. The starting point to this endeavor will be the most outstanding contribution to a systematic study of lexical motivation from a cross-linguistic point of view in recent times, namely the approach developed by Koch and colleagues (most prominently Koch 2001 and Koch and Marzo 2007). Building on the concept of motivation as developed by Saussure and modified by Ullmann, Koch and his colleagues have developed a complete framework for the analysis of lexical motivation both in synchrony and diachrony, introducing both a more elaborate version of the formal aspects of lexical motivation and incorporating recent ideas from Cognitive Linguistics into the analysis of the semantic aspects of lexical motivation. While the treatment of the history of thoughts about cross-linguistic aspects of lexical motivation would have been incomplete without briefly mentioning the approach of Koch and colleagues, it will be discussed at length in the following chapter, which introduces the framework of the present study and sets out the basic classificatory grid used.

